

WHY HAMILTON NEEDS AN URBAN FOREST MANAGEMENT PLAN

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Hamilton Naturalists' Club



Hamilton Naturalists' Club

- 600 member, volunteer-based, charitable organization
- Founded in 1919 as Hamilton Bird Protection Society
- Inventories - 83 years of bird counts, First Hamilton Nature Area Inventory '91, 2001, 2014
- Manage over 400 acres of nature sanctuaries
- Mission: protection, appreciation, and restoration of natural areas in and around Hamilton
- Urban Forest Project launched April 2014



Urban Forest Definition:

- all the trees and wooded areas in a city, natural or planted, on public or private property
- shared resource that provides wide range of benefits to entire community
- increasingly viewed as cornerstone of a healthy and sustainable community:
 - “an investment in the economic and environmental well-being of the city” C. Alexander, TD Chief Economist (Urban Forests: The Value of Trees in the City of Toronto, 2014)



Why is the Urban Forest Important?

| Environmental | Social | Economic |
|--|--|---|
| Improving air and water quality (McPherson et al. 1997, Nowak et al. 2006, Irga et al. 2015) | Supporting emotional well-being (Velarde et al. 2007, Hansmann et al. 2007) | Increasing property values (Tyravainen 2000) |
| Reducing heat island effects (Bowler et al. 2010, Park et al. 2012) | Engaging communities (Townsend 2006, Fisher et al. 2015) | Reduced energy consumption (Dwyer et al. 1992) |
| Providing wildlife habitat & biodiversity (Alvey 2006, Lerman et al 2013) | Promoting active living (Zhang et al. 2015) | Encouraging commercial activity (Wolf 1997) |
| Storm water attenuation (Xiao et al. 1998, city-specific <i>i-Tree</i> evaluations) | Supporting human health (Donovan et al, 2013, van den Berg et al. 2015, Nowak et al. 2014) | Reduced crime and social service spending (Kuo et al. 2001, Troy et al. 2012) |

What is an Urban Forest Management Plan?

- long-term strategic framework for sustainable urban forest management
- Considers:
 - status and extent of the urban forest – tree resource composition, condition, distribution
 - review of tree management policies, responsibilities, regulations
 - known and anticipated threats and stressors
 - best practices and specific tools
 - input from various departments and stakeholders
- PRODUCES:
 - set of collaboratively defined goals and objectives
 - implementation plan/ specific actions to address goals

Why an Urban Forest Management Plan for Hamilton? (Part 1)

- need to maintain (& increase) environmental benefits
 - Toronto: urban forest environmental benefits & cost savings \$80 million/year – reduced strain on water transportation/processing infrastructure, air pollutants absorbed, energy conservation
- well-managed urban forest saves money
 - NYC: trees provide \$5.60 in benefits for every \$1 spent on planting/care
- ash tree losses, ice storm damage, climate change = need a coordinated/ comprehensive approach
- chance to engage residents/community groups for sustainable management of privately-owned urban forest

Why an Urban Forest Management Plan for Hamilton? (Part 2)

- ‘Behind the 8-ball’: 24 municipalities in S.Ont are already implementing their urban forest management plans
- Hamilton has lowest urban canopy cover around at 18.7% (2009) (likely this has decreased due to EAB)
- Hamilton set an urban forest canopy cover target in the Corporate Strategic Plan in 2007 – no implementation plan in last 8 years!
- Approved Climate Change Action Plan (2015) – promoting LID, securing/enhancing green infrastructure key
- Staff recommendation to produce a ‘Tree & Woodland Protection Strategy’ approved as part of the Urban Woodland Conservation Bylaw (1/2 acre >) in 2014.

Why an Urban Forest Management Plan for Hamilton? (Part 3)

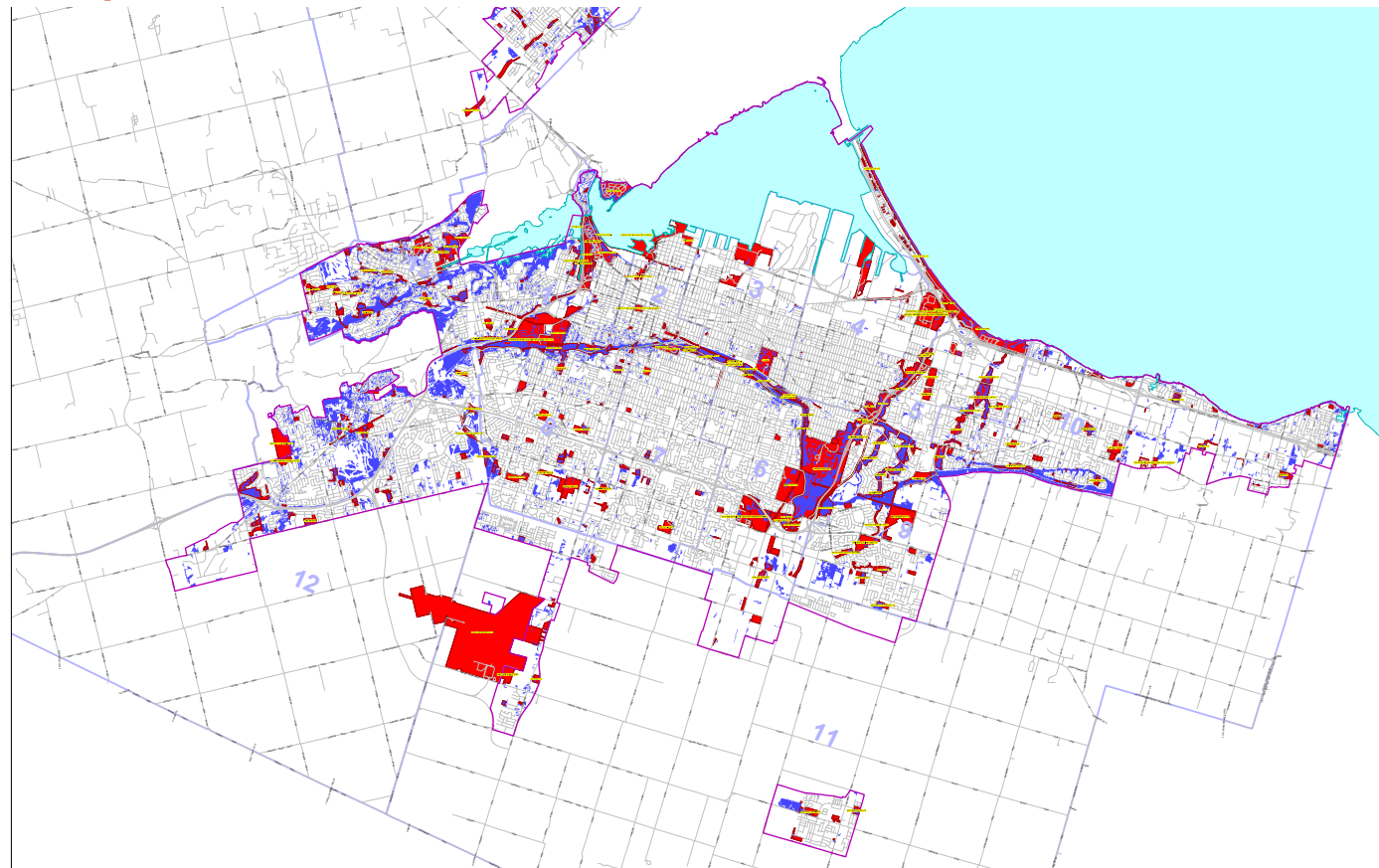
- Broad base of support within City, from external stakeholders, and the public
- HNC convened representatives from 15 groups/multiple City departments to talk about strategies for enhancing our urban forest in 2014/2015
 - 3 meetings, ~25 participants: Planning, Forestry, Sustainability Office, Hamilton Conservation Authority, RBG, ENGO's, neighbourhood hub reps, interested community members
 - Support in principle for a strategic management plan and looking to Council for leadership
 - Work plan being developed by Planning staff

Planting the seeds for a healthy and sustainable urban forest for the whole of Hamilton into the future.





650+ City sites with forest cover ($\frac{1}{2}$ acre \geq)



- Legend
- Ward Boundary
 - Forest Patches $\geq 0.5ac$
 - City Properties

City Owned Properties with Urban Forest Patches $\geq 0.5ac$



Source: City of Hamilton, Planning & Economic Development, GIS Section, June 2014 Land Use, MPAC, April 2014 City Owned Properties, Real Estate Department, October 2014 Urban Forest Cover & Biomass Inventory, H&B Corbett Inc., 2010, Aerial Photography August, 2009

Date Plotted:
October 2, 2014



PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
GIS - PLANNING & ANALYSIS

Urban Forest Project

- Trees Count (2014) community tree inventory in Westdale
 - surveyed 1372 public and private trees
 - 25 volunteers
 - 30 ha block in Westdale over 12 weeks – 30 pieces of data per tree
- Trees, Please! (2015) Backyard Tree Planting Program in Crown Point
 - Air quality and urban greening already identified as priorities by neighbourhood hub group
 - Full tree cost and tree planting service provided
 - Arborist-selected native species, tree planting workshop, backyard visit & tree selection with homeowner, aftercare pamphlet
 - 45 trees total: 20 backyards, 25 school yard park
- Urban Forest Strategy Meetings (2014/2015)

Legend

Temperature (C)

